

WHAT IS CLAIMED IS:

1. An access point device having an interface function with a network constructed of wired transmission channels and establishing datalink connection with a plurality of mobile stations within the area of a radio LAN, the device comprising:

notification means for notifying a network administrator administering said LAN of the presence of an authentication-requesting mobile station so as to gain the final authorization of an authentication procedure when a mobile station in the area perform said authentication procedure before the initiation of an association procedure; and

input means from which said network administrator notified inputs an authentication-authorizing or -rejecting instruction with respect to said authentication-requesting mobile station.

2. An authentication method for an access point device having an interface function with a network constructed of wired transmission channels and establishing datalink connection with a plurality of mobile stations within the area of a radio LAN, the method initiating an association procedure after authentication is completed of said mobile stations by performing:

a first step in which said mobile stations and said access point device initiate a predetermined authentication

procedure in response to an authentication request from said mobile stations to said access point device;

5 a second step in which said access point device, in authorizing the authentication of said mobile stations by said authentication procedure, notifies a network administrator administering said LAN of the final authorization of said authentication procedure and starts an authentication wait timer before said access point device returns an authentication response message, or the final message in said authentication procedure, to said mobile stations, said authentication wait timer being set at a maximum wait time up to the final authentication;

10 a third step in which said network administrator provides a final authentication-authorizing or -rejecting instruction to said access point device before the timeout of said authentication wait timer;

15 a fourth step in which said access point device, when said network administrator provides a final authentication-authorizing instruction before the timeout of said authentication wait timer, returns said authentication response message to said mobile stations as authentication authorization; and

20 a fifth step in which said mobile stations receiving said authentication response message start said association procedure.

3. The authentication method for an access point device according to claim 2, wherein in the third step, said authentication response message is returned to said mobile stations as authentication rejection when said network administrator provides the authentication-rejecting instruction to said access point device.

4. The authentication method for an access point device according to claim 2, wherein in the third step, said authentication response message is returned to said mobile stations as authentication rejection when said authentication wait timer goes time-out before said network administrator provides the authentication-rejecting or -authorizing instruction to said access point device.

5. The authentication method for an access point device according to any one of claims 2-4, wherein said authentication procedure is the Shared Key Authentication procedure defined in IEEE 802.11.